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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,078	09/25/2003	Robert Parlee	parlee01.005	5824
25247 7590 01/10/2007 GORDON E NELSON PATENT ATTORNEY, PC 57 CENTRAL ST PO BOX 782 ROWLEY, MA 01969			EXAMINER KUHS, ALLAN R	
			ART UNIT 1732	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/10/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary

Application No.

10/671,078

Applicant(s)

PARLEE, ROBERT

Examiner

Allan Kuhns

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20, 23 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 20, 23 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. Please review the specification for inconsistency since the terms "silicon" and "silicone" appear to be used to denote the same object or layer. An example appears at page 6, line 23.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bishop et al. (5,019,312) in view of Baron (4,954,209) as set forth in the rejection of claims 18 and 19 in the previous Office action. It is submitted that the exothermic reaction reported by Bishop et al., for example at column 1, line 67, inherently results in at least some heat being applied to the mold, as in claim 26. Forming a mold from a conductive material, such as a metal, is well known in order to produce a mold cavity which retains its shape under pressures applied or built up during molding.

4. Claims 20 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Applicant's arguments filed October 23, 2006 have been fully considered but they are not persuasive. Applicant first argues that Bishop's mold does not completely enclose the lay-up and the tubes at the joint and states that the halves of mold 22 (Bishop) remain separated by layers of fabric 40 and the filler mixture 42 when the mold halves are bolted together. This is not persuasive because, to the examiner, the lay-up

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and tube of Bishop are still completely enclosed by the mold, even when some fabric and filler material are located between mold halves or at the parting plane.

Applicant then argues that the above-described positioning of layers by Bishop causes the mold to not exert its force evenly throughout the lug. But since the Bishop reference teaches at column 5, line 3 and 4 that "the two mold halves are firmly bolted or otherwise forced or secured together", it is the examiner's position that one of ordinary skill in the art would have recognized that if sufficient clamping pressure is applied to the mold halves, force would be evenly exerted, as in claim 25, such that differential compaction, as asserted by Applicant, would tend not to occur.

Applicant argues, in referring to Figure 6 of Bishop, that the lay-up does not form a continuous wrap around the tubes and all layers of fabric other than layers 40(a) and 40(b) are not wrapped around tube 16. But layers 40(a) and 40(b) themselves would constitute a continuous wrap.

Concerning Baron, Applicant argues that the technique is employed to mold large objects with simple geometries, lugs in bicycle frames are neither large nor of simple geometry, and it is not seen how the techniques of Baron's could be usefully applied to forming lugs for bicycle frames. But the view of the examiner is that it is well within the skill level of one of ordinary skill in the art to size silicon sheets appropriate for use in a smaller mold used for forming lugs.

Applicant summarizes by asserting that neither Bishop nor Baron disclose (1) a lay-up that forms a continuous wrap around the tubes, (2) a mold whose inner surface completely encloses the lay-up and the tubes at the joint and which has a lining of

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silicon which is trapped between the inner surface and the enclosed lay-up and tubes, and (3) a mold (to) which the effect of applying heat to the interior of the mold causes the trapped silicon to expand against the mold's inner surface and compact the enclosed lay-up against the tubes evenly throughout the lug. But it is the examiner's position that these aspects are taught or suggested by the combination of Bishop et al. and Baron, as set forth previously. The examiner regards a parting line as an inner surface of a mold.

Applicant also argues that using Baron's heated blankets in Bishop's mold does not result in the method of claim 25 as the blankets would simply be another layer and the mold's inner surface would not completely enclose the lay-up and the tubes at the joint. But, as expressed previously, the examiner's position is that Bishop et al. alone teach or suggest the claimed limitation of completely enclosing the lay-up and tubes.

6.THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allan Kuhns whose telephone number is (571) 272-1202. The examiner can normally be reached on Monday to Thursday from 7:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson, can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Allan R. Kuhns
ALLAN R. KUHN
PRIMARY EXAMINER AU 1732
1-5-07